1.4.3 ADN, obligations of the filler and the unloader

Transmitted by the Government of Germany

**Summary**

**Executive summary:** The wording of the instructions relating to the calculation of and compliance with the permissible loading and unloading flows described in 9.3.2.25.9 and 9.3.3.25.9 is inaccurate and vague.

**Action to be taken:** Amend the obligations relating to compliance with loading and unloading rates at 1.4.3.3, for the filler, and 1.4.3.7.1, for the unloader; amend the indications in the certificate of approval for tank vessels; define who should write the instructions for permissible loading and unloading rates.

**Related documents:** None

**Introduction**

1. Sections 9.3.2.25.9 and 9.3.3.25.9 establish that, for type C and N tank vessels, the permissible loading and unloading flows shall be calculated. The permissible maximum loading and unloading flow for each cargo tank or each group of cargo tanks shall be given in an on-board instruction (see also 8.1.2.3 (i)).

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1 Text distributed in German by the Central Commission for the Navigation of the Rhine under the symbol CCNR-ZKR/ADN/WP.15/AC.2/2016/18.
2. The filler, in 1.4.3.3 (s), or the unloader, in 1.4.3.7.1 (j), is required to follow the “loading instructions”. This expression does not correspond to the text of the rules for construction at 9.3.2.25.9 and 9.3.3.25.9 and may lead to misunderstandings.

3. In 1.4.3.7.1 (j), the unloader must ascertain that the loading flows conform. He cannot do so, because he is unloading, not loading, the vessel.

4. Section 8.1.2.3 (i) correctly refers to the “instructions for loading and unloading flows”.

5. The model certificate of approval for tank vessels (8.6.1.3) refers in point 10, inaccurately and too restrictively, only to “Loading rate” and also to “loading instructions”.

6. Sections 9.3.2.25.9 and 9.3.3.25.9 do not define who is responsible for the correct formulation of the instructions for permissible loading and unloading rates.

7. At its twenty-seventh session, the Safety Committee recognized these inconsistencies in principle and invited the German delegation to submit a working document at the next session.

**Proposal**

8. In 1.4.3.3 (filler), amend subparagraph (s) as follows:

“(s) He shall ascertain that loading flows conform to the instructions on loading and unloading flows referred to in 9.3.2.25.9 or 9.3.3.25.9 and that the pressure at the crossing-point of the gas discharge pipe or the compensation pipe is not greater than the opening pressure of the high velocity vent valve;”

9. In 1.4.3.7.1, amend subparagraph (j) as follows:

“(j) Ascertain that the unloading flows conform to the instructions on loading and unloading flows referred to in 9.3.2.25.9 or 9.3.3.25.9 and that the pressure at the connecting-point of the gas discharge pipe or the gas return pipe does not exceed the opening pressure of the high velocity vent valve;

10. In 8.6.1.3, amend item 10 of the model certificate of approval for tank vessels as follows:

“10. Loading/unloading rate: ....m³/h ¹) or see loading/unloading instructions ¹).”

11. In 8.6.1.4, amend item 10 of the model provisional certificate of approval for tank vessels as follows:

“10. Loading/unloading rate: ....m³/h ¹) or see loading/unloading instructions ¹).”

12. In 9.3.2.25.9 and 9.3.3.25.9, amend in each case the last sentence as follows:

“The permissible maximum loading and unloading pressure for each cargo tank or for each group of cargo tanks shall be given in an on-board instruction approved by the classification society that certified the vessel.”

**Justification**

13. By the amendments in paragraph 8 above, the filler’s obligation is specified, and the instructions to be followed are clearly stated.
14. The amendment in paragraph 9 above removes from the obligations of the unloader a wrong reference to loading and specifies and clearly describes the instructions to be followed.

15. The amendments in paragraphs 10 and 11 above remove from the text of the certificate of approval and the provisional certificate of approval an unnecessary restriction on the loading rate that applies only to unloading, and gives the correct wording in accordance with the rules of construction.

16. The amendment in paragraph 11 above describes and clarifies for the first time who is responsible for the technically correct formulation of the loading and unloading instructions. It must be the classification society that certified the boat, because it is also that society that approves the design of cargo tanks and piping as part of the ADN monitoring procedure, and in accordance with its own rules for construction.

**Safety**

17. Transport safety is improved, insofar as there is an improvement in provisions that are unclear and could give rise to misinterpretation, and sources of technical errors in loading and unloading are removed.

**Implementation**

18. No change in the design of the vessel or its equipment is required. Staff of the companies concerned can be informed very easily of the changes they need to be aware of in loading and unloading. Approval of these loading and unloading instructions is consistent with current practice.